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ISO/TC 69/SC 6/WG 1 AND ISO/TC 69/SC 6 - REMCO JOINT WORKING GROUP MEETINGS LONDON, UK 1985 - 06 - 24/27

R. Sutarno
Physical Chemistry Section
Extraction Metallurgy Laboratory

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ISO/TC 69/SC 6/WG 1 AND ISO/TC 69/SC 6 - REMCO JOINT WORKING GROUP MEETINGS LONDON, UK 1985 - 06 - 24/27

by

R. Sutarno*

This report covers the ISO/TC 69/SC 6/WG 1 (Working Group on Revision of ISO 5725) and ISO/TC 69/SC 6 - REMCO joint working group meetings held in London, UK 1985 - 06 - 24/27 to discuss a long term revision of standard ISO 5725 - "Precision of test methods: The determination of repeatability and reproducibility by interlaboratory test method" and preparation of ISO Guide 33 "Uses of reference materials for assessment of test methods".

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*Research Scientist, Physical Chemistry Section, Extraction Metallurgy Laboratory, Mineral Sciences Laboratories, CANMET, Energy, Mines and Resources Canada, K1A 0G1

ISO/TC 69/SC 6/WG 1 ET ISO/TC 69/SC 6 - RENCONTRES DU GROUPE D'ÉTUDE MIXTE REMCO, À LONDRES, ROYAUME-UNI, DU 24 AU 27 JUIN 1985

par

R. Sutarno*

Ce rapport traite des rencontres des groupes d'étude ISO/TC 69/SC 6/WG 1 (Groupe d'étude sur la révision de la norme ISO 5725) et ISO/TC 69/SC 6 - Groupe d'étude mixte REMCO (Comités des matériaux de référence) tenues à Londres (Royaume-Uni) du 24 au 27 juin 1985, dans le but d'étudier la révision à long terme de la norme ISO 5725 "Fidélité des méthodes d'essai-Détermination de la répétabilité et de la reproductibilité par essais inter-laboratoires" et de la préparation du Guide 33 de l'ISO "Utilisation des matériaux de référence pour l'évaluation des méthodes d'analyse".

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*Chercheur scientifique, Section de la chimie physique, Laboratoire de métallurgie extractive, Laboratoires des sciences minérales, CANMET, Énergie, Mines et Ressources Canada, K1A 0G1

ISO/TC 69/SC 6/WG 1

ISO TECHNICAL COMMITTEE ON APPLICATION OF STATISTICAL METHODS - SUBCOMMITTEE ON APPLICATION OF PRECISION DATA

WORKING GROUP 1 - REVISION OF ISO 5725

Meeting: Hampden House, BSI, London, UK

Date : June 24-25, 1985

Present: W.H. Oakland (UK, Chairman), W.F. Michell (UK, Secretary), P.Th. Wilrich (Germany), K. Zedeler (Denmark), T. Miyazu, Y. Ojima (Japan), R. Sutarno (Canada), H.C. Hamaker (Netherlands), W.B. Smith, H.A. Croasdale, N.A. Smart, J.H.J. Mallaby and P. Wright (UK)

ISO 5725 is the main ISO standard for measuring precision of test methods. Issued by TC 69, this standard was written in generic form to be used by other ISO technical committees as the model for measuring the precision of standard methods they develop. It must be balanced to be sufficiently general (in order to be used fully by a wide variety of technical committees), and yet specific enough to maintain uniformity within ISO.

There are many flaws in the present version of ISO 5725 both minor (editorial) as well as major (technical) in nature. In order to maintain the existance of at least one version of this standard, it was agreed that two stages of revision will be made; the short term (minor) revision and the long term (major) revision. The short term revision is now complete and in the process of being published. The purposes of this meeting was to discuss the long term revision.

Technical discussion

The secretariat presented the new version of ISO 5725 in four parts as agreed in the previous working group meeting (Berlin 1984). These documents (see the appended list) were discussed in detail mainly from the technical point of view. In this discussion, the European delegates were preoccupied by the anticipation of the passing of the "product liability" legislation that is currently in front of the European Parliament. This

legislation will have serious effects on the future uses of standard methods as well as reference materials. After lengthy discussion, it was agreed that the new version of ISO 5725 will be expanded to deal with accuracy as well as precision of measurement methods. The title of the standard will be changed accordingly and the following decisions were made:

1. The structure of the document will again be changed; the present draft parts 1, 2, 3 and some clauses of part 4 will be combined to form part 2 and the secretariat will redraft this part, taking into account all comments made during the meeting.

2. H.C. Hamaker is requested to write the introductory part (Part 1). The content of this part will be the various items suggested at the meeting.

3. The present part 4 will be part 3 in the new version and will contain the following sections.

(a) The Canadian contribution to the section on comparison between methods was technically accepted with some editorial changes. Because this document has been in the BSI word processor, BSI was kind enough to make these editorial changes and to incorporate them in the future draft.

(b) The Japanese proposal on the stability of precision measures has to be redrafted taking into account all comments made at the meeting. The Japanese delegate will submit the new draft at the next meeting.

(c) The Danish proposal on certification of laboratories has to be redrafted taking into account all comments made at the meeting. The Danish delegate will submit the new draft for the next meeting.

(d) The German proposal on conformity with specification is presently in circulation within the German national committee and is undergoing translation. It will be submitted at the next meeting.

Other subjects discussed at this meeting included the work of the former WG 2 "Acceptability of results". The Secretariat of SC 6 has redrafted the document. However it left out the method used by ISO/TC 102/SC 2. The delegates agreed that the TC 102/SC 2 chart will be incorporated in the document and it will be issued for subcommittee voting.

The next meeting of the working group will be held in Tokyo, Japan, September 30-October 1, 1985.

ISO/TC 69/SC 6 - REMCO JOINT WORKING GROUP

Meeting: Hampden House, BSI, London, UK
Date : June 26-27, 1985

Present: R. Sutarno (Canada, Chairman), E. Colinet (EEC), P.Th. Wilrich (Germany), W.H. Oakland (UK), T. Miyazu, Y. Ojima (Japan), H.C. Hamaker (Netherlands) and W.F. Michell (UK, Secretary)

The purpose of this meeting was to discuss the second draft of ISO Guide 33 "Uses of reference materials for assessment of measurement procedure". This document is planned to be published both as an ISO Guide and as one of the sections of ISO 5725.

The basic criterion of assessment used in the present draft of ISO Guide 33 is that the test procedure is acceptable if it has both precision and accuracy equal to or better than those test procedures used for certification of the certified reference material (CRM). This criterion may not be realistic in many situations. Therefore after a long discussion, it was agreed that it should be generalized to include various requirements other than zero bias. These requirements could come from various sources such as legal sources, guidelines of authority, previous experience, commercial contract, etc.

The assessment of a test procedure should be divided into three categories:

(a) Assessment of the procedure as such; which should be conducted by interlaboratory program.

(b) Assessment of the procedure as applied by a particular laboratory; both long term and short term.

(c) Calibration of the procedure.

This procedures are assessed in terms of:

(i) precision where the use of CRM is not mandatory;
(ii) accuracy where the use of CRM is mandatory.

Action

After a long discussion, the following actions were agreed to:

1. To instruct Dr. M. Parkany, Secretary of REMCO to postpone the publication of ISO Guide 33, until further consideration.

2. To instruct W.F. Michell, Y. Ojima and R. Sutarno to prepare a preliminary third draft of ISO Guide 33, taking into account all comments made at the meeting.

3. To circulate the preliminary third draft to the joint working group and the members of REMCO for consideration and comment.

4. To request E. Colinet to attend REMCO meeting in November 1985 to explain the new approach taken at the joint working group meeting.

5. To try to arrange a joint working group meeting in Tokyo to coincide with ISO/TC 69/SC 6 meeting in October 1985.

Third preliminary draft of ISO Guide 33

This draft was written quickly at BSI on June 27, 1985 by W.F. Michell, Y. Ojima and R. Sutarno. It incorporates all the comments made during the joint working group meeting to the second draft. It is to be circulated to the members of both the joint working group and REMCO for consideration and comment by August 16 to enable a revised document to be prepared for discussion in Tokyo on 2/3 October 1985.

Organization

ISO/TC 69 and REMCO have similar functions within the ISO activities. Both function as horizontal committees i.e., that the standards/Guides produced by these committees are to be used by other ISO technical committees. The work of preparation, characterization and uses of reference materials involves considerable statistical methodology. For this reason, a joint working group was formed in 1980 with the purpose of dealing with the statistical aspects of reference materials work. Being a member of both committees, the writer has been unofficially acting as the

convener of this joint working group since its inception. Although this joint group has been functioning well technically, sometimes organizational difficulties are encountered (who calls meetings, circulates documents, etc.). For this reason, in view of the volume of the work still to come, it was decided to formalize the joint group into an ISO working group and Canada is requested to accept the convenership. This acceptance is of course subject to the approval of the Standards Council of Canada.

Conclusion

The four-day meeting has been technically productive. The new version of ISO 5725 should be greatly improved as a result of this meeting. The new ideas incorporated into the draft of ISO Guide 33 should make the document more useful to the average user of reference materials. The anticipation of the passing of product liability legislation by the European Parliament will result in a more important role for international standard methods in international exchange of goods and services. This is important for Canada as a trading nation. Because both documents are used as the basic (generic) document for other technical committees within ISO, it is necessary that they must be technically sound. To ensure this, it is recommended that Canada continue to support their development. Since Canada has been playing an important role in the work of the joint working group between ISO/TC 69/SC 6 and REMCO, i.e., drafing both ISO Guide 35 and 33 and acting as unofficial convener since its inception, it is recommended that Canada formally accept the convenership of this joint working group.

APPENDIX A

List of document discussed at the meeting

1. ISO 5725 Precision of test methods
   Part 1: The principles for the determination of repeatability and reproducibility for a standard test method by interlaboratory tests
   ISO/TC 69/SC 6/WG 1 N 85/62305

2. ISO 5725 Precision of test methods
   Part 2: The mathematics for the determination of repeatability and reproducibility for a standard test method by interlaboratory tests
   ISO/TC 69/SC 6/WG 1 N 85/62306

3. ISO 5725 Precision of test methods
   Part 3: Related precision measures
   ISO/TC 69/SC 6/WG 1 N 85/62307

4. ISO 5725 Precision of test methods
   Part 4: Practical application of precision measures
   ISO/TC 69/SC 6/WG 1 N 85/62308

5. ISO 5725 Precision of test methods
   Part 4 - Section 5: Stability of test results within and across laboratories

6. ISO 5725 Precision of test methods
   Part 4 - Section 4: Assessment of new laboratories and continued assessment of existing laboratories
   J. 1985 No.: 508-1, KZ/101

7. ISO 5725 Precision of test methods
   Some problems in applied statistics
   ISO/TC 69/SC 6/WG 1 N 85/62909

8. ISO 5725 Precision of test methods
Criteria values of Cochran's test
ISO/TC 69/SC 6/WG 1 N 85/62386

9. Uses of certified reference materials for this assessment of measurement procedure (Second draft of ISO Guide 33), MRP/MSL 84-158 (J).